

REVIEWS

DUODENAL ULCER. By B. G. A. MOYNIHAN, M.D. (London), F.R.C.S., Senior Assistant Surgeon at Leeds Infirmary, England. Second edition; pp. 486; 78 illustrations. Philadelphia and London: W. B. Saunders Co., 1912.

THE author has conferred much on the surgical world in bringing out his work on *Duodenal Ulcer*. This the second edition is not only considerably enlarged, consisting of 486 pages as against 376 in the old edition, but it also contains a discussion of 115 additional cases operated upon for duodenal ulcer which were not reported in the first edition.

The work considers duodenal ulcer in all its aspects, from the clinical and operative standpoint, as well as from that of the postmortem table.

The writer impresses upon his reader the fact that most "functional" indigestion or "dyspepsia" is nothing but an organic lesion and that "hyperchlorhydria" is duodenal ulcer, a stand that many medical men fail to take.

Much importance is placed by Moynihan on the anamnesis, and he believes that if carefully and intelligently taken it aids greatly in the diagnosis. He also explains his "hunger pain" statement.

The pathology of duodenal ulcer is discussed in detail and the various types taken up and described admirably. Gurling's ulcer, uremic ulcer, ulcer associated with melena neonatorum, jejunal ulcer, carcinomatous, tuberculous, acute, and chronic ulcers all receive their due share of consideration.

The chapter on differential diagnosis and treatment is masterly, and much emphasis is placed on the possibility of there being multiple lesions in any given case, such as duodenal ulcer associated with gallstones, pancreatitis, appendicitis, etc., a very important fact to note at operation.

The surgical technique, the operations, and the factors governing their choice are clearly and concisely stated. Preoperative and postoperative treatment of all cases is described in detail. Especial attention is given to the need of haste, care, and gentleness in the presence of perforation. The various points throughout the work that the author deems important are illustrated by cuts or case histories both of which are complete and satisfying, all unnecessary details, as a rule, being omitted.

Possibly there are too many illustrations of more or less similar specimens, thus giving unnecessary bulk to the book. A few minor typographical errors and the needless repetition word for word of at least one history in two places in the text are the only other adverse criticisms we have to offer.

The work is excellent, well written, clear, and exceedingly instructive, comprising as it does, virtually all that is at present known of duodenal ulcer, its pathology, diagnosis, and treatment.

E. L. E.

SURGERY AND SOCIETY: A TRIBUTE TO LISTERISM. By C. W. SALEEBY, M.D., F.R.S.E., Fellow of the Obstetrical Society of Edinburgh; formerly Resident Physician Royal Infirmary and Resident Surgeon Maternity Hospital of Edinburgh. Pp. 395. New York: Moffat, Yard & Co., 1912.

"THE motives and purposes of this volume are in part personal, in part, public. The personal motives are gratitude for great benefit lately received from surgery and desire to make some reparation for too hard words spoken of the surgical profession some years ago under stress of intense and honest conviction. The public motives are, to state the case for surgery and, therefore, for science, in modern society; once more to challenge the anti-vivisectionists; to demand the first of what I call the rights of mothers, from my standpoint as a eugenicist; to state the women's share in this most beneficent of human achievements, and to discuss the place and needs of surgery in the new experiments for national control of disease, toward which modern politics is tending."

The paragraph above cited, which is prefixed as a note to this volume, speaks for itself. The book is serious like the author, who with many other zealous men feels his duties in regenerating mankind weigh heavily upon him, and no doubt, sympathizes with the psalmist, who, after explaining that the earth and the inhabitants thereof were dissolved, added "I bear up the pillars of it."

There is no doubt whatever that few intelligent persons will not profit by reading this book. It is interesting in its historical aspects no less than in its statement of present conditions and its prophecy of the future. The descriptions of "Surgery as it Was," of the changes introduced by anesthesia, and of the newer and more rigorous obligations imposed by the discoveries of Pasteur and by all that is connoted in the word Listerism, give graphic pictures of many things which the public ought to know for their own self-protection and that of their families and children, but

Then comes a chapter on Listerism and War; and in this the author points out not only the importance of hygiene in camps, and the part which antiseptics and asepsis have played in decreasing the mortality from wounds in war; but he also proceeds to the matter of recruiting soldiers and to the difficulty which is experienced in some countries in obtaining physically fit recruits—all because Listerism as applied to childbirth, to the slums, to the public-school system, etc., has not been understood by the politician.

This is but half of the book; but the space allotted for review has already been exceeded, and we trust that the character of the volume has been indicated, and that there are many who will want to read it to the end. It is worth it.

A. P. C. A.

A TREATISE ON TUMORS. FOR THE USE OF PHYSICIANS AND SURGEONS. By ARTHUR E. HERTZLER, M.D., Assistant Professor of Surgery in the University of Kansas. Pp. 728; 538 illustrations, and 8 plates. Philadelphia and New York: Lea & Febiger, 1912.

The book is divided into three parts. The first part deals with the general biology of tumors, including discussions of the nature, classification, structure, growth, metastasis, etiology, and other important features. The second part consists of eighteen chapters dealing with the pathology of the special forms of benign and malignant tumors. This part is broadly pathological in character, but the pathological features are made subservient to the more dominant clinical phases. The third part deals with the regional consideration of tumors and is essentially clinical in character, making frequent reference, however, to the more purely scientific material of the second part. Twenty-six chapters comprise the third part, four of which are on the female genital tract, one entire chapter being devoted to carcinoma of the uterus. The book is profusely illustrated with drawings and photographs of clinical appearance, gross morbid anatomy, and pathological histology of tumors, in addition to which there are several illustrations of steps in operations indicated in the treatment. The binding is excellent, the paper heavy and glossed, and the type large and clear, divisions of the text being indicated by heavy-faced type and italics. The index is not so complete as might be desirable, there being no mention of several important conditions, notable among them being epithelioma. This is not a matter of nomenclature for the term appears in the text in various places.

From the point of view of the pathologist the book is fairly complete. It adds little if anything to the present conceptions of the etiology and general biology of tumors. Exactness of termin-

ology is not strictly adhered to, but this feature does not serve to diminish the clarity of the subject matter. The classification is simple and clear, but not sufficiently comprehensive in the subdivisions. There is too little stress laid on the subdivision of the epithelial tumors and the consideration of the various types of malignant epithelial tumors is incomplete, in so far as the histological types are concerned. In this group the important benign cystic epithelioma has not been placed, nor is it found in the index. It seems unfortunate that the "vast field of experimental oncology has been entirely omitted," for there are undoubtedly many facts that have been learned that are adaptable to a broad conception of tumor biology in its relation both to the experimental worker and the practitioner. This is especially true of transmissibility, local and general immunity, and heredity. The illustrations in this division tend to be sketchy in the histological details, as for example, Figs. 15, 17, 31. There is little attention given to the finer study of highly magnified preparations.

The regional consideration of tumors presents the work in a thoroughly authoritative fashion and is worthy of the highest praise. Both physician and surgeon will find here much of interest and instruction, for there are presented in very clear fashion the pathology, diagnosis, and treatment of the various tumors found in the given region. A clear idea is presented as to the relative frequency of the tumors considered, the differential diagnosis is discussed sufficiently and a very detailed description of the modes of treatment indicated. Important operations are described and illustrated and some of the plates, notably that showing the lymphatics of the neck are exceptionally good. The illustrations descriptive of the clinical phases of the tumors are excellent and are splendidly correlated with gross morbid anatomical and histological photographs and drawings. The literature in this division of the book has been brought up to date much more carefully than that of the part on tumors in general.

On the whole the book may be said to be of value to the laboratory man chiefly as it brings him in touch with the views of the practical surgeon; but for the general practitioner, the student of surgical pathology, the active surgeon, it must prove of great interest and worth.

H. T. K.

LABORATORY MANUAL OF PHYSIOLOGY. By FREDERICK C. BUSCH, B.S., M.D. Second edition; pp. 212; 46 illustrations. New York: William Wood & Co., 1911.

THERE is no field in the medical sciences in which a good book is so necessary as in that of practical physiology. The unsettled

and different attitudes of the various teachers of this branch is difficult to meet. What is considered of great importance by one is given a subsidiary position by another. Therefore the fact that this book, under these difficulties, has reached its second edition justifies attention and favorable consideration. The author covers the whole subject in a general way, starting with experiments of a fundamental nature and extending these to include phenomena of an applied nature. His purpose is to give a fundamental knowledge of the subject to the general student, and at the same time to make the exercises have a practical value to the student of medicine. Although one may wish for a greater and more thorough consideration of the latter side of the subject, nevertheless it is impossible in many laboratories with their limited available equipment. The author has succeeded in giving us a book that can be generally used. The instruments with which the student must become acquainted are described in a simple and lucid manner, and the diagrams are valuable. The book is sufficiently illustrated, and the exercises clearly described. In all, the book is a valuable addition to those already existing and has many advantages.

E. L.

PATHOLOGISCHE ANATOMIE: EIN LEHRBUCH FÜR STUDIERENDE UND AERZTE. Herausgegeben von L. ASCHOFF. Second Edition. Volume I: General Etiology and Pathology. Pp. 778; 419 illustrations, many of which are colored. Volume II: Special Pathology. Pp. 997; 655 illustrations, many in colors, and 1 lithographed plate. Jena: Gustav Fischer, 1911.

The fact that this book in the short space of two years appears in a second edition is sufficient evidence of its wide popularity. Its merit is unquestionable and its scope is so great that a detailed review seems advisable.

The extensive alterations found in text, arrangement, and illustration make for vast improvement in the work and in its present form the book is practically a new entrant in a field where its excellence alone is sufficient reason for its being. Assuming that the reader has some familiarity with the first edition, it is sufficient to point out the principal changes made in the second edition.

The chapter on exogenous causes of disease, which in the first edition was the last work of Albrecht, has been somewhat rearranged and enlarged by R. Rössle, the enlargement being most noticeable in the latter's comprehensive discussion of heredity and heritable conditions. Askanazy, in rewriting the chapter on exogenous causes of disease, has retained the form of his original contribution, but has added numerous valuable illustrations, the colored drawings

of the ova of many of the metazoan parasites being of especial value in rendering the text additionally instructive. Following these chapters an entirely new chapter by Rössle, on the general pathology of the cell, has been inserted. This is a brief but intensely thoughtful consideration of the morphological, physical, and chemical organization of the cell in its normal and pathological conditions; it serves an extremely useful purpose in elucidating the retrogressive cell phenomena. Schwalbe's chapter on malformations and monsters has been altered so little as to need no comment.

Gierke's chapter on metabolism has been increased in text and illustration, and the writer presents his subject with increasing breadth of view. As in the first edition, however, he permits the pathological conceptions to outweigh all others, and waving aside the wider considerations of metabolism as a complex process in the entire organism, deals chiefly with the morphological changes which result from altered nutrition and metabolism of the individual cell or organ.

Dietrich's chapter on circulation has been enlarged by an increased elaborateness of discussion of the circulation in its general aspect, of the disturbances of lymphatic circulation, and of embolism and metastasis. He clings to Cohnheim's conception of end arteries, and continues to accept the old Weigert distinction between hemorrhagic and anemic infarction.

In the first edition Kretz presented the subject of immunity in eight pages. He has rewritten and enlarged this chapter so that the subject matter, much of which is printed in fine type, now occupies thirty-one pages. Brief as is its present form, the chapter gives a clear discussion of the condition of infection, the pathogenesis of infectious diseases, and the nature of immunity. The descriptive sections on serum therapy, bacteriolysis, agglutination, precipitation, anaphylaxis (hypersusceptibility), cytotoxins, and phagocytosis (including opsonins) individually are good, but, as indicated, are arranged in an illogical and unnecessarily confusing sequence. Following these sections, the theory of immunity receives conventional discussion and is illustrated with the usual diagrams of Ehrlich's side-chain theory.

Lubarsch's chapter on inflammation can be dismissed with the simple statement that only slight alterations have been made, the article preserving its original clearness, authority, and breadth of view.

Borst, in his chapter on pathological growth, has considerably elaborated the discussion of metaplasia, and has written a section on transplantation, which is so much more complete and comprehensive than that of the first edition that it essentially is a new presentation. The same writer also has revised his chapter on tumors, including in the new edition an excellent discussion of

experimental work on tumors and a splendid *resume* of the present knowledge of the nature of tumors, which has been acquired by experimental research. Except for a slight change in the position of adamantinoma, the classification remains the same as in the old edition.

The sense of proportion and balance displayed in the book is splendidly maintained throughout, the only possible exception to this statement being the brevity of the chapter on immunity. It would seem that the rapid growth and increasing importance of this subject demands more attention both from pathologist and bacteriologist than even the enlarged chapter by Kretz, gives it. Granting this, however, it will be seen that this edition lays new claim to the position which Aschoff's book, from its first appearance, took as one of the leading German works in general pathology. Its excellent artizanship, its logical arrangement, its judicious illustration, its careful, clear, and painstaking treatment of the wide variety of subjects necessary in such a work, make its recommendation a duty and pleasure.

In addition to an enlargement and revision quite in keeping with that seen in the volume on general pathology, the volume on special pathology shows numerous changes in arrangement. In the present form of the book the chapters on nervous system, urinary apparatus, and genitalia follow one another in the order named, but appear between the chapters on respiration and gastro-intestinal tract; the chapter on the thymus body is retained, but the hypophysis, which was discussed in an appendix to the chapter on nervous diseases, now is included in the chapter on glands of internal secretion. All the chapters have a bibliography appended, a feature much missed in the first edition.

Aschoff has rewritten and enlarged his chapter on heart and pericardium, has elaborated the discussion on pathological physiology of the heart, and now gives a clear but brief exposition of the alterations in rhythm and association which follow disturbances of the cardiac transmission tracts. Benda's chapter on the vessels shows the beneficial effect of much careful rewriting, rearrangement, and additional illustration, and is advantageously enlarged by new and complete sections on veins and lymphatic vessels. Schridde, in the chapter on the blood-forming organs, has enlarged the sections on Hodgkin's disease and on the "myeloses." It is gratifying to see his increasing appreciation of the interrelation between the outspoken leukemias and similar aleukemic conditions. Naegli's chapter on the blood remains much as it appeared in the first edition, except for elaboration of the sections on the various forms of anemia and leukemia.

O. Naegli's chapter on the thymus is enlarged, and the subject is presented clearly and concisely, but his personal views are emphasized even more dogmatically than in the older edition.

M. B. Schmidt has retained much of the form and text of his interesting and well-written chapter on the organs of motion (bones, joints, muscles, etc.) and has added an instructive section on the permanent alterations in the skeleton resulting from congenital and acquired pathological conditions.

Beitzke's chapter on the organs of respiration shows a more complete consideration of the diseases of the bronchi and a more elaborate discussion of the inflammatory processes in the lungs than appeared in the first edition.

The changes in P. Ernst's chapter on the nervous system are slight and hardly worthy of description.

Aschoff, in the chapter on the urinary apparatus, now divides chronic kidney affections into three instead of two groups—chronic tubulo-glomerular nephritis, chronic regenerative nephritis, and chronic kidney alteration the result of altered circulatory conditions.

M. Simmonds, in rewriting and enlarging his chapter on the male genitalia, has added several new illustrations, and has included in the text a new and valuable section on the pathology of the male urethra. Aschoff has rewritten the chapter on female genitalia so as to enlarge it and make it of distinctly greater value.

Almost certainly the most gratifying change is found in the chapter on the gastro-intestinal tract. In the first edition this was covered in a somewhat perfunctory fashion by Bernh. Fischer, but in the second edition has been taken over by Aschoff. The latter, although adhering to the original plan of Fischer, has entirely rewritten and greatly elaborated all the sections; he has added a section on hernia, and has made the chapter a splendidly written, well illustrated exposition of the pathology of this system. C. Sternberg has made very little change in his chapter on liver, bile passages, and pancreas.

Von Gierke, in the chapter on glands of internal secretion, markedly improves his chapter by a greater elaborateness of discussion of the normal and pathological physiology of the various glands.

Jores, in the chapter on skin, has made only minor changes in text and nomenclature.

It will readily be seen that the entire book has received alterations which distinctly increase its value. It deserves the same high praise that is bestowed on the volume on general pathology. It is difficult to understand the unfortunate sequence of chapters which has been mentioned above; and there is no clear reason why the thymus should not be included with the ductless glands, especially when one observes the statement of Naegeli himself that this gland is not lymphatic in character, nor does it have any blood-forming function, being in his opinion a gland purely of internal secretion. Putting aside these more or less academic considerations, the fact remains that the book is well balanced and well

written, it shows an admirable attempt to break away from purely morphological descriptions, shows a spirit of deep philosophy, is a safe guide and authoritative text-book, and in common with the volume on general pathology should continue to hold an extremely high place in the scientific literature of the world. H. T. K.

DIE STÖRUNGEN DES VERDAUUNGSAPPARATES ALS URSACHE UND FOLGE ANDERER ERKRANKUNGEN (THE DISTURBANCES OF THE DIGESTIVE APPARATUS AS THE CAUSE AND CONSEQUENCE OF OTHER DISEASES). By DR. VON HANS HERZ, in Breslau. Second edition. Part I. The Blood, Metabolic and Constitutional Diseases in their Relation to the Digestive Apparatus. Pp. 218. Berlin: S. Karger, 1912.

WITH this volume begins the publication of the second edition of Herz's comprehensive correlative work on the disturbances of digestion, and the statement is made on the cover of Part I that the further numbers will appear in quick sequence. As far as the writer is aware, there have been no English translations of this work, the first edition of which appeared in 1898.

To wide readers of foreign literature or to European workers it doubtless needs no introduction, but to the American medical public the work is probably but little known.

To pass final judgment upon the present edition as a whole from the first section now at hand, would be premature, but a review of Part I suggests that no radical departure is to be made in this edition from the plan and scope of its predecessor. The title of the work reveals what an almost limitless field Herz has attempted to cover, and how nearly impossible of success such an effort must be in our present state of knowledge. That a single author should compass the multitudinous relations implied is bold enough, but is, perhaps, less remarkable than that he should be able to present them with brevity. It is plain that this could be accomplished only by necessary sacrifices here and there, but Herz has succeeded, nevertheless, in presenting an enormous array of curious, commonplace, and rare facts of a practical and very real interest.

The plan of the work consists in presenting and considering at length, under their respective headings of the various diseases of other organs, those disturbances of digestion which may occur as the causes, complications, or sequelæ of these conditions. In his discussion of these factors, the author presents the views of leading workers in a given line, less by a statistical summary of what has been done than by a rather happy personal style of exposition which holds the readers' attention. There is given here, of course, much play for individual opinion, of which Herz stands in no

lack, but he seems to have kept a dispassionate outlook in the midst of much controversial evidence, frequently leaving the issue frankly undecided. In other cases, however, he does not hesitate to offer conclusions as when, under gout, he states that until further evidence is forthcoming, we can in general, regard digestive disturbances in this condition as an expression of the gout itself.

The advance of medicine since the publication of the last edition of this work has been so considerable as to necessitate, evidently, not only the rewriting of most parts, but also the composition of many new ones, evidence of which is clear in the table of contents and the rearrangement of its sections. Tetany, for example, has come in for a share of attention which the activity of workers in that line has of late years drawn upon it. In a consideration of its etiological factors, Herz takes occasion here, as elsewhere, to indicate his own attitude. He leans away from the view which would make gastro-intestinal toxins in the circulating blood factors of direct injury to the parathyroid glands, and espouses instead the interesting but fancifully elaborated hypothesis of which Falta, Eppinger, and Rudinger are the sponsors.

The field of usefulness of a work such as this lies, of course, in many directions, but it must extend chiefly to the clinician who concerns himself with a philosophical view of medicine or the more abstract research worker who may enter the clinical realm. The book is not one from which the practical physician may expect much help, except in the study of obtruse problems within its sphere, but it should be of much interest to any intelligent reader of medicine, and a store-house of information to the clinical investigator.

The paper on which the work is printed is rather heavy, but the type, as in most German texts, is excellent. A fairly extensive bibliography accompanies Part I.

R. P.

CESAREAN SECTION IN GREAT BRITAIN AND IRELAND. By ARMAND ROUTH, M.D., F.R.C.P. Obstetric Physician to Charing Cross Hospital, London; and Consulting Physician to Samaritan Free Hospital for Women, London, etc. Pp. 233. London: Sherratt & Hughes, 1911.

This book is the enlargement of a report read at the international Congress in St. Petersburg, 1910, and contains tables of 1282 cases of Cesarean section by over 100 British obstetricians and gynecologists living on June 1, 1910. It is designed to present a complete statement of British work done in Cesarean section. Cases of hysterotomy and hysterectomy performed before fetal viability, and cases of ruptured uterus have been excluded.

Routh introduces before his tables a historical sketch of the various operations which preceded Cesarean section, and also the modern operations which compete with it.

In treating of the history of Cesarean section in Great Britain, he quotes Playfair's statement in 1866 that the mortality was then 89 per cent. The mortality of Cesarean section has steadily diminished from 38 per cent. in 1891 and 1896; 20 per cent. in 1902; about 12 per cent. in 1904, until at the time of writing the operation has scarcely any morbidity, and a mortality under favorable conditions of 2.9 per cent.

In 1906, 90 cases for contracted pelvis are reported with a mortality of 2.2 per cent.; in 1908, 154 cases with a mortality of 4.5 per cent.

Routh brings up the interesting question of Cesarean section in septic cases, and draws attention to the familiar fact that repeated examinations and efforts to deliver with forceps increase the mortality three-fold. Likewise the rupture of the membranes before operations increases the mortality nearly five times.

He draws attention to Maxwell's recommendation that the amniotic cavity be irrigated with normal salt solution or boric acid solution, at a temperature of 100° F. before Cesarean section is performed. This may be accomplished by passing a soft metal, pliable tube into the uterus.

Where the parturient canal is probably infected, and the fetal heart weak, or the child deformed or injured, craniotomy with intrauterine irrigation is indicated; where the uterus is evidently infected, hysterectomy with intraperitoneal treatment of the stump. Thus in 216 cases infected before operation, the maternal mortality was 27.7 per cent. with the classic Cesarean section; while in 14 cases infected, treated by hysterectomy with intraperitoneal treatment of the stump, there was no maternal mortality.

In contracted pelvis, British obstetricians induce labor at the thirty-fifth week for moderate contraction, with the fetus of proportionate size. If the patient is first seen at full term or labor, with no attempts to deliver, conservative section would be chosen, and in infected cases hysterectomy.

In pregnancy complicated by fibroids the patient should go to term, with section if required. In cancer, patients seen early, should have total hysterectomy, if the case is favorable for operation. If unfavorable, the patient should go as nearly as possible to full term and be delivered by section.

In ovarian tumors complicating pregnancy, it is safest to remove the tumor as early as possible. In cases seen at labor, if the tumor is abdominal, vaginal delivery should be practised with ovariectomy later. If conditions are unfavorable, removal of the tumor and section are best.

Where other pelvic tumors, retroflexion of the uterus, or stenosis are present, section has a legitimate field.

It is thought that in concealed accidental hemorrhage abdominal Cesarean section may be done in the interest of the mother. In placenta previa, section is limited to rigid undilatable cervix, with mother and child in good condition. In eclampsia, with the patient getting steadily worse and the cervix undilatable, abdominal Cesarean section may be employed.

= Vaginal Cesarean section is not a favorite operation in Great Britain.

At the time of writing, it is estimated that Cesarean section by all operators, from all indications in the United Kingdom, has a maternal mortality of 8.1 per cent. In contracted pelvis the mortality with all operators was 6.1 per cent., and when favorable cases were selected was 2.9 per cent.

This interesting and valuable collection of cases will prove of great service to obstetricians throughout the world in determining the true place for the important operation of delivery by abdominal section.

E. P. D.

A MOTHER'S GUIDE. A MANUAL FOR THE GUIDANCE OF MOTHERS AND NURSES. By FRANCIS TWEDELL, M.D., Alumnus Bellevue Hospital, New York; Fellow of the New York Academy of Medicine; Assistant Physician to the Babies' Hospital Dispensary, New York. Pp. 183; 10 illustrations. New York: James T. Dougherty, 1911.

THE author's statement, in his preface, that he aims "to give simple, clear, and complete directions, especially as regards nursing and artificial feeding of infants, and disorders of digestion," is well borne out by a perusal of his book. This little work will undoubtedly prove to be a great help to physician, nurse, and mother.

The physician will find it useful as a source of reference to which the mother can be directed for specific information as to how to carry out his orders, such as for pasteurization, sterilization, peptonization of milk, preparation of whey, barley water, beef juice, etc. To the nurse it will be a ready reference book when memory fails.

An intelligent mother, who grasps the thought of the book and so acquires a rational outlook on the problems of infant life, will be well repaid for the time spent in its study. As a guide to how to keep a healthy baby well it leaves nothing to be desired.

The advisability of including the section on acute infections is doubtful, especially as treatment is outlined. The symptoms of graver import are, however, described and if the frequent admonition to call in the family physician is not disregarded, while this treatment is tried, it may serve a useful purpose.

A. A. H.

OPHTHALMIC MYOLOGY. A SYSTEMATIC TREATISE ON THE OCULAR MUSCLES. By G. C. SAVAGE, M.D., Professor of Ophthalmology (Defects of the Eye) in the Medical Department of Vanderbilt University. Second edition; pp. 685; 84 illustrations and 6 plates. Nashville: Published by the Author; printed by McQuiddy Printing Company, 1911.

As the law of monocular and binocular rest and motion, as also the law of direction, is based upon the recognition of the true locations of the posterior and anterior poles of the eye, the author insists that Helmholtz's work is vitiated by two fundamental errors: (1) In not taking the centre of the macula as the posterior pole, and (2), in holding that visual lines are axial rays instead of prolonged radii of retinal curvature. He also thinks that Listing's law is not true, but "should be forgotten in the interest of truth." The writer posits a number of innervation centres, not upon the basis of anatomical localization, which he considers necessary to explain the phenomena of ocular movements.

In the practical portion of the work adequate space and consideration is given to the various anomalies of the ocular muscles. Cyclophoria, which is in large measure peculiarly the writer's own domain, is perhaps more fully treated than in any other work dealing with this subject. Numerous apposite clinical cases are cited in illustration of the principles laid down. Among the former, it may be worth while to call attention to the report of a case in which an eye with good vision was enucleated, but not by the author, to relieve severe nervous symptoms caused by what was considered hopeless muscle imbalance. The operation is said to have cured the patient—a truce to comments!

T. B. S.

MANUAL OF PRACTICAL PHYSIOLOGY. By JOHN C. HEMMETER, M.D., Ph.D., LL.D. Pp. 223; 55 illustrations. Philadelphia: P. B. Blakeston's Son & Co., 1912.

THE practical physiology of Hemmeter is the product of the long experience of the teacher and no doubt, in the hands of his students, is of great value. The instruments described are in a large measure those of Porter, from whom he liberally contributes in describing them. He takes up in an elementary manner, muscle and electrophysiology. In like manner he considers blood and circulation. Respiration receives scant attention as does vision and digestion. The internal secretions, however, are given considerable space and the chapter devoted to this subject is very satisfactory. Immunity is also referred to. The text is clearly written in simple language which, no doubt, can be readily understood by the student.

E. L.